

AMENDMENTS TO THE SPECIFICATION:

Please amend the title as follows:

Decoding Device Apparatus, Decoding Method, and Program to Decode Low
Density Parity Check Codes

Please amend the specification as follows:

Please amend the paragraph, which begins on page 52, line 18 as follows:

More specifically, for the sub-matrix whose weight is 2 or more, the data (the message corresponding to the edges belonging to the unit matrix, the sum matrix, or the shift matrix) corresponding to the positions of is of the unit matrix whose weight is 1, the quasi-unit matrix, or the shift matrix,[[,]] when the sub-matrix is represented in the form of the sum of two or more of the (P x P) unit matrix whose weight is 1, the quasi-unit matrix in which one or more 1s, which are elements of the unit matrix, are substituted with 0, and the shift matrix in which the unit matrix or the quasi unit matrix is cyclically shifted, is stored at the same address (the same FIFOs among the FIFOs 311₁ to 311₆).